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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/981,419	10/18/2001	Hans-Joachim Graf	CSA 20147	6267

7590 11/20/2002

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EXAMINER
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NUTTER, NATHAN M

ART UNIT	PAPER NUMBER
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1711

DATE MAILED: 11/20/2002

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Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/981,419

Applicant(s)

GRAF, HANS-JOACHIM

Examiner

Nathan M. Nutter

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1711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2. 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Specification***

The disclosure is objected to because of the following informalities: the graph at page 2 should be cancelled and replaced with a Figure drawing, along with a proper "Brief Description of the Drawing". The graph is not proper.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The recitations in the claims of "high molecular weight" and "low molecular weight" without qualification as to what type of molecular weight is being employed for this measurement render the instant claims as vague and confusing. The recitation of "molecular weight" by bare numbers is not acceptable claim language. Molecular weights may be expressed as "number average", "weight average", "z" average" or "viscosity average", and each is different for the identical polymer. As herein recited, the proper metes and bounds of the claims cannot be clearly ascertained in the sense of 35 U.S.C. 112, second paragraph.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakata et al taken with Srinivasan, both newly cited.

The reference to Nakata et al teaches the manufacture of a rubber blend comprising an EPDM copolymer having a Mooney viscosity of 35 to 55 with an EPDM copolymer having a Mooney viscosity of 5 to 25. Note the Abstract, column 2 (lines 25-33) and column 3 (lines 38-48). At column 1 (lines 41-57), the reference teaches the ethylene content for the EPDM rubbers to be at 60 to 70 weight %, which embraces those as herein claimed. The incorporation of other constituents, including carbon black, processing aids and the like, is disclosed at column 3 (lines 57-68).

The reference to Srinivasan teaches the manufacture of a blend of EPDM rubbers as recited, one being a high Mooney viscosity copolymer of 10-120 with a "relatively high molecular weight" and the other being a low number average molecular weight copolymer, admixed with a diene rubber. Note the Abstract and column 2 (lines 3-38). The lower Mooney viscosity value for the low number average molecular weight copolymer would have been inherent based on the molecular weight. The blend may contain other diene rubbers at column 2 (lines 38-54), and styrene-butadiene rubber at

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the table in column 4, as herein claimed. The reference teaches the addition of other additives, including pigments and dyes at column 5 (lines 24-35).

The inclusion of the diene copolymer, including the styrene butadiene as taught by Srinivasan, in the composition as disclosed by Nakata et al would have been obvious since both references are drawn to EPDM blends useful for molded articles. The Mooney viscosities of the EPDM copolymers of Nakata et al overlap directly with those claimed herein. All other constituents and conditions are conventional, as shown by either reference.

The reference to Tsuji et al, cited of interest, teaches the production of a blend which may comprise a "low molecular weight (EPDM) component copolymer" with a "high molecular weight (EPDM) copolymer", as well as other diene rubber compounds, including styrene butadiene copolymer at column 7 (lines 22-30), as herein claimed. Note the Abstract, column 3 (line 60) to column 4 (line 21) for the Mooney viscosity values and the Tables 1-3 which show the inclusion of other constituents as recited herein. The reference is not deemed to present a bar to the patentability of the instant claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nathan M. Nutter whose telephone number is 703-308-2443. The examiner can normally be reached on Monday-Friday 9:30 am to 6:00 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 703-308-2462. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

A handwritten signature in black ink, appearing to read "Nathan M. Nutter". The signature is fluid and cursive, with the first name "Nathan" being more prominent than the last name "Nutter".

Nathan M. Nutter  
Primary Examiner  
Art Unit 1711

nmn  
November 14, 2002